

ABSTRACT

The device of the invention for filtering fluids conveyed at high pressure is easy to service and withstands very high pressures whilst having an appreciably larger filter area than conventional high-pressure filters. For this purpose it is provided with an inlet opening (21), an outlet opening (24) and a metal housing (2) that encloses a filter chamber (23) and has a service opening (3,4) which is closed by a lid (14,15), likewise of metal, which is seated by a contact force on a rim portion (5,6) surrounding the service opening (3,4) in direct contact with the metal of the housing (2), wherein the rim surface (7,8) of the rim portion (5,6) that is associated with the lid (14,15) slopes between its inner boundary edge (10) associated with the service opening (3,4) and its outer boundary edge (12) such that the rim surface (7,8) forms an angle (13) deviating from 90° with the adjacent inside surface (9) and outside surface (11) of the rim portion (5,6) and the contact surface between the lid (14, 15) and the rim portion (5,6) is limited to a fraction of the rim surface (7,8), and wherein there is arranged inside the filter chamber (23) a filter element (26) through which a fluid flows on its way from the inlet opening (21) to the outlet opening (24).

25

Abstract to be accompanied by Figure 1.